



Upper Arkansas Newsletter

Subbasin Water Resource Management Program

Groundwater Management District No. 3 Groundwater Model



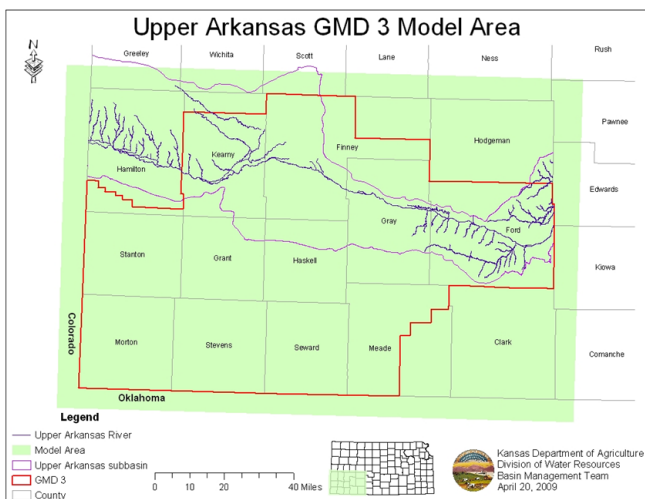
The Upper Arkansas River subbasin is made up of the Arkansas River and three distinct aquifer systems, including the alluvial aquifer, the Ogallala-High Plains aquifer and the Dakota aquifer. Most of the subbasin is within the boundaries of Southwest Kansas Groundwater Management District # 3.

The Arkansas River originates in Colorado and transverses through Hamilton, Kearny, Finney, Gray and Ford counties as it flows east. Several issues are affecting the basin, including groundwater depletion related to diversion for irrigated agriculture and channel impairment by reduction in peak flows. To better understand these issues and how the aquifers respond to various hydrologic conditions, the Kansas Geological Survey is constructing a groundwater model for GMD 3.

The area included in the groundwater model is shown in the figure below, and includes boundaries that extend into Colorado to the west and Oklahoma to the south. Currently, improvements are being made with head boundary conditions, recharge, hydraulic conductivity, and streambed conductivity within the model. Work is also being done to improve the model results on water levels, streamflows and water budgets. The focus of the GMD 3 model is to learn more about aquifer storage and change through time, the stream-aquifer interactions along Upper Arkansas subbasin and other alluvial aquifer systems within GMD 3. With further understanding, appropriate management strategies can be implemented. The model should be complete in 2010.

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Upper Arkansas GMD 3 groundwater model boundary.

The model is scheduled to be complete in 2010.

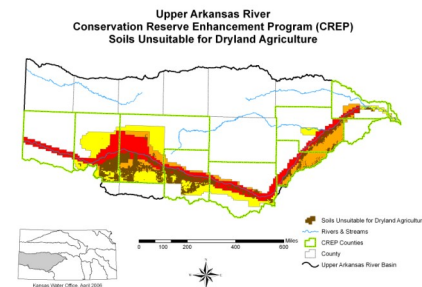
Conservation Reserve Enhancement Program (CREP) Update

by Steve Frost, State Conservation Commission

The Upper Arkansas River Conservation Reserve Enhancement Program is an innovative water-management project that has been in development for many years. It was approved by the Kansas Legislature in 2008 as a cost-leveraging mechanism to facilitate permanent water right retirement and long-term water conservation in an arid part of Kansas.

The monetary damage award Kansas received as a result of the lawsuit over the Arkansas River with Colorado provided the statutorily protected basis for the five-year investment in the program. The primary beneficiaries are the producers and residents in the area who have suffered historic water and economic deprivations from Colorado, but there are also water supply benefits enjoyed by all the people of Kansas. Since its official initiation just one brief year ago, 16,479 acre-feet of annual water right authorization has already been permanently retired. That amount alone is sufficient to meet the annual needs of Arkansas River Basin communities like Garden City and Dodge City well into

Continued on Page 3



Conservation Reserve Enhancement Program target areas.

Arkansas River Compact

As a result of litigation brought by Kansas, Colorado adopted use rules that govern pumping of high-capacity irrigation wells along the Arkansas River in Colorado from near Pueblo to the Colorado-Kansas state line. The states agreed to evaluate the sufficiency of the Colorado use rules and their administration for the period from 1997 through 2006.

As a result of that evaluation, the states are working on an agreement that will establish how Colorado will implement the requirements of their use rules. The period of engineering expert discussions have passed with good progress made toward agreement. A joint report of the experts is being submitted to the Colorado state engineer and the Kansas chief engineer. They will have 60 days to resolve any remaining issues related to this agreement. Subsequently, the matter will be submitted to the Arkansas River Compact Administration for possible resolution.

Litigation is finally concluded after nearly a quarter century!

On December 1, 2008, Kansas Attorney General Steve Six appeared before the U.S. Supreme Court in an effort to recover approximately \$9 million in expert witness fees that Kansas incurred during the Kansas v. Colorado litigation that ran from 1985 to 2008.

On March 9, 2009, the court adopted the special master's final decree and ruled that Kansas is not entitled to more than the \$40 per day previously awarded for expert witness fees as prescribed in federal code. With this decision, the court has addressed the last remaining issue. The litigation is finally concluded after nearly a quarter century.

CREP (continued)

the future. An additional 8,198 acres of associated erodible land are now enrolled in the Conservation Reserve Program with USDA's Farm Services Agency, the state's chief partner agency in this landmark effort.

In addition to the federal government, multiple state and local agencies and private associations are integrally involved in the effort to obtain even more productive, sustainable results over a very broad spectrum of natural resource needs. Special concerns such as permanent re-vegetation of the fragile sand hill areas of southwest Kansas are a good example of the critical issues capable of being addressed by this project.

As of December 31, 2008, a total of \$496,670.66 has been expended by the State Conservation Commission for the state upfront payments in 50 separate contracts to producers who have been approved and enrolled in the CREP program. *Based on these 50 contracts alone, producers will receive approximately \$14.5 million in additional direct payments from the Farm Service Agency over the 14- to 15-year contract period for CREP enrollment.*

***Sign up for CREP now!
Ask your local FSA Office
for information about
eligibility, rates and
conservation practices
available!***

The Kansas Legislature has currently authorized the program to a capacity of 40,000 total acres over the five-year life of the enrollment period. The state's official memorandum of agreement with USDA currently provides for a cooperative enrollment of up to 20,000 acres with special restrictions to minimize economic impacts. Funding for the state's producer incentives is currently authorized by the Legislature until June 30, 2009.

Sign up for CREP now! Inquire at your local county FSA office for information about eligibility, rates and conservation practices available.

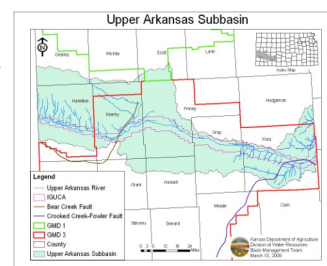
Help with water rights is available at the DWR field office nearest you!

2008 Upper Arkansas Field Summary Available Online!

by Tara Lanzrath

The Subbasin Water Resource Management Program compiles annual summaries of hydrologic data for each subbasin within a project area. The Upper Arkansas subbasin project area is located in southwest Kansas, and the 2008 summary for the region is now available. Data include USGS streamflow, National Climatic Data Center precipitation, water levels and water use, in addition to general background information on the geographic area

Overall rainfall in 2008 for the Upper Arkansas subbasin was just above average at 19.73 inches. With higher precipitation, streamflows were improved for 2008. However, in general, water levels in the Ogallala-High Plains aquifer continue to decline. Reported water use in 2007 was below average and was the lowest reported use for the 20-year period from 1987 to 2007.



Upper Arkansas Subbasin

For more detailed information on the Upper Arkansas subbasin, please visit our website at www.ksda.gov/subbasin/ and select Upper Arkansas River Subbasin and Field Summaries.



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SWRMP Mission Statement

To analyze aquifers and stream systems in targeted areas and work with stakeholders to develop and assess strategies to protect water rights and improve hydrologic sustainability.

The program uses a five-phase process that includes:

- Initiating the project
- Analyzing and educating
- Evaluating alternatives
- Making recommendations
- Implementation

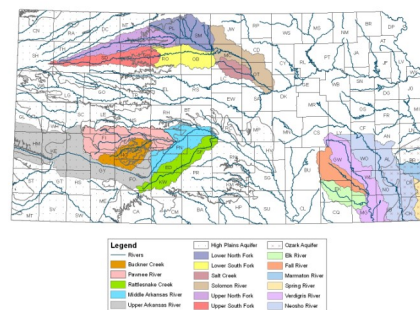
Visit <http://www.ksda.gov/subbasin/> to learn more about the process.

Subbasin Water Resource Management Program (SWRMP)

The SWRMP provides biannual publications with the latest news and events for each of the targeted project areas. Targeted areas currently include Upper and Middle Arkansas River subbasins, Pawnee-Buckner, Rattlesnake Creek, Solomon River Basin, Ogallala-High Plains aquifer and the Ozark Plateau aquifer systems. To sign up for these bi-annual publications, visit our website at www.ksda.gov/subbasin/mailling_listid.

The newsletters are distributed electronically or can be viewed online.

In addition, the Division of Water Resources publishes a newsletter quarterly and provides information on Kansas' water resources. You can view current or past newsletters online at www.ksda.gov/dwr/.



*Subbasin Water Resource
Management Targeted Areas*